WHAT IS CLAIMED IS:

1. A method for manufacturing a microlens array comprising:

providing a bundle of optically transparent members;

cutting the bundle of optically transparent members to form at least one sheet of optically transparent member segments;

heating the at least one sheet of optically transparent member segments to form lens segments; and

covering a portion of at least one of the lens segments with a light-shielding layer.

2. The method of Claim 1, wherein the microlens array forms at least a portion of a display screen.

3. The method of Claim 2, wherein the display screen is part of a camera, a personal digital assistant, a telephone, a laptop, a computer monitor, a television, a photocopy screen, a projection screen, or a billboard.

4. The method of Claim 1, further comprising coating at least one of the lens segments.

5. The method of Claim 4, wherein the coating comprises an anti-reflection coating and/or an anti-glare coating.

6. The method of Claim 1, further comprising providing a Fresnel lens sheet, wherein light passing through the lens segments will also pass through the Fresnel lens sheet.

7. The method of Claim 1, wherein a diameter of one or more of the optically transparent members is different than some of the optically transparent members within the bundle of optically transparent members.

8. The method of Claim 7, wherein the diameters of the optically transparent members at a periphery of the bundle are different than the diameters of the optically transparent members in a core area of the bundle.

9. The method of Claim 1, further comprising modifying at least one end of the optically transparent member segments.

10. The method of Claim 9, wherein the modifying comprises modifying both ends of said optically transparent member segments.

11. The method of Claim 1, wherein the providing comprises adhering the optically transparent members together using an adhesive to form a honeycomb-like structure.

12. The method of Claim 1, wherein the optically transparent members are made of a glass, a polymer, and/or a plastic.

13. The method of Claim 1, wherein the lens segments comprise a convex, a concave, or a planer lens surface.

14. The method of Claim 1, wherein the heating comprises heating both ends of each optically transparent member segment to form a lens surface thereon.

15. The method of Claim 1, wherein the at least one sheet has a thickness of between about 100 μm and 2 mm.

16. A display screen comprising:

optically transparent members formed as one or more microlens array sheets and adapted to provide a pathway for light, wherein each of the optically transparent members has a lens formed on at least one end of the optically transparent member; and

a light-shielding layer disposed adjacent to the sheet and adapted to block a portion of the light leaving each of the optically transparent members.

17. The display screen of Claim 16, further comprising a thin-film coating covering the lens of at least one of the optically transparent members.

18. The display screen of Claim 16, further comprising a Fresnel lens sheet, wherein the light passing through the lens of at least one of the optically transparent members will also pass through the Fresnel lens sheet.

19. The display screen of Claim 16, wherein the display screen is part of a camera, a personal digital assistant, a telephone, a laptop, a computer monitor, a television, a photocopy screen, a projection screen, or a billboard.

20. The display screen of Claim 16, wherein a diameter of one or more of the optically transparent members is different than other ones of the optically transparent members.

21. The display screen of Claim 16, wherein the optically transparent members are made of a glass, a polymer, and/or a plastic.

22. The display screen of Claim 16, wherein the microlens array sheet has a thickness of between about 100 μm and 2 mm.

23. A method for providing a display screen formed as a microlens array, the method comprising:

providing optically transparent cylindrical rods bundled together to form a structure having a honeycomb-like cross section;

cutting the bundle of optically transparent cylindrical rods to form at least one sheet of optically transparent rod segments, each optically transparent rod segment having a first end and a second end and adapted to channel light;

heating both ends to form a lens surface on said ends; and

covering a portion of the lens surface on the first ends with a light-shielding layer.

24. The method of Claim 23, wherein the display screen is incorporated into a camera, a personal digital assistant, a telephone, a laptop, a computer monitor, a television, a photocopy screen, a projection screen, or a billboard.

25. The method of Claim 23, further comprising applying a coating over the lens surface on the first ends.

26. The method of Claim 23, further comprising providing a Fresnel lens sheet, wherein the light passing through the optically transparent cylindrical rods will also pass through the Fresnel lens sheet.

27. The method of Claim 23, wherein a diameter of one or more of the optically transparent cylindrical rods is different than other ones of the optically transparent members within the bundle.

28. The method of Claim 23, wherein the providing comprises adhering the optically transparent cylindrical rods together using a UV curable adhesive to form the bundle.

29. The method of Claim 23, wherein the optically transparent cylindrical rods are made of a glass, a polymer, or a plastic.

30. The method of Claim 23, wherein the lens surface comprises a convex, a concave, or a planer lens surface.

31. The method of Claim 23, wherein the at least one sheet of optically transparent rod segments comprises a thickness of between about 100 μm and about 2 mm.